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September 14, 2010

AGENDA ITEM 3b

TO: MEMBERS OF THE BENEFITS AND PROGRAM ADMINISTRATION COMMITTEE

I. SUBJECT: Implementation of the New Actuarial Assumptions for Member Calculations & Review of Cost Calculation for Additional Service Credit Purchase

II. PROGRAM: Retirement

III. RECOMMENDATION:

That the Committee recommend that the Board approve the final report on the review of ARSC purchases and approve the following changes for service credit purchases under the “present value” method as per Government Code Section 21052 effective immediately:

- Modify the service retirement assumptions used in the calculation of the cost of service credit purchase under the “present value” method to be twice the service retirement pattern assumptions that are used in the annual actuarial valuation.

- Improve the costing method by only considering assumptions for salary increases, service retirement pattern and post-retirement mortality in the present value calculations.

That the Committee recommend that the Board approves the use of the new actuarial demographic assumptions in all affected member calculations effective immediately.

IV. ANALYSIS:

Background

At its April 2010 meeting, the Board accepted the CalPERS Experience Study report covering the period between 1997 to 2007 and approved the new demographic assumptions for use in the actuarial valuations as of June 30, 2009 and later affecting the 2010-2011 State and Schools contribution rates and the 2011-2012 public agency contribution rates as outlined in the experience study report.

As mentioned in April, the new actuarial assumptions also affect certain member calculations. These include the cost of any service credit purchased under the present value method (including military service credit and ARSC) and any optional form of benefit elected by a member. Other member calculations impacted by the new assumptions include Temporary Annuity factors and Actuarial Equivalent Reduction (AER) factors.

Also last April, the Actuarial Office provided an update to the Board on a review of the cost of Additional Retirement Service Credit (ARSC) purchases staff was performing to determine whether the assumptions used to calculate the cost of ARSC purchases should be changed. The study has been completed and a copy of the final report can be found in Attachment 1.

Service Credit Purchase Factors

The study performed by CalPERS actuarial staff only looked at members who purchased ARSC. As indicated in Government Code Section 20909, members electing to purchase ARSC are required to contribute an amount equivalent to the increase in employer liability as specified in Section 21052. This method is referred to as the “present value” method. Other types of service credit purchases are also calculated using the present value method like military service credit purchases. Because of the very small number of members purchasing other types of service under the “present value” method, it was not possible to study them separately. However, staff believes the results of the ARSC study are applicable to all service credit purchases calculated using the “present value” method.

As part of this review, the focus was placed on comparing the salary increases assumptions used in the calculation of ARSC purchases and the assumptions related to the timing of the service retirement. Staff believes that these two assumptions have the biggest impact on the cost of ARSC purchases since members can choose the time most favorable to purchase ARSC.

Overall, the ARSC study found that members that purchased ARSC retired at a much faster rate than those that did not purchase ARSC. This was true irrespective of age, service, benefit formula and membership category. More information can be found in the full report.

The ARSC study found that there were no material differences between the salary increases received by members following their ARSC purchases as compared to members who did not purchase ARSC.

As a result of this review, staff proposes that the service retirement pattern assumptions used in all service credit purchases under the “present value” method be twice those used in the annual actuarial valuation and adopted by the Board in April 2010.

Staff also proposes using the same assumptions for salary increases in calculating the cost of service credit purchase under the “present value” method as the ones used in the annual actuarial valuation and adopted by the Board in April 2010.

In addition, staff proposes changing the method used to calculate the cost of service credit purchase under the “present value” method by only considering the retirement and post-retirement mortality actuarial assumption in the present value calculations. In other words, the new method will no longer consider the probability that some individuals may never receive a service retirement benefit and instead become disabled, die, or terminate their CalPERS membership.

The proposed changes to the actuarial assumptions and method for the calculation of the cost of service credit purchases under the present value method will increase the purchase cost. The actual increases in cost will depend on the plan and the member’s age at the time of purchase. Staff believes that these changes are necessary to ensure that the member contributes an amount equal to the increase in employer liability as required by Government Code Section 21052.

The following table shows the estimated average increase in cost to purchase service under the present value method broken down by plan. Note that these averages were based on the average age at purchase for the last few years. The actual increases might be bigger or smaller than shown in the table below depending on the age at the time of purchase.

Estimated Average Increase in Cost of Purchasing Service under the Present Value Method using the Proposed Assumptions and Methods

Plan	**Average Increase**
Public Agency Miscellaneous	17%
Public Agency Safety	24%
State Miscellaneous	18%
State Industrial	12%
State Safety	23%
POFF	23%
CHP	16%
Schools	38%

As can be seen above, we expect the average State Miscellaneous member to have to pay 18% more to purchase service credit under the “present value” method if the proposed change in actuarial assumptions and method is approved. Please refer to Appendix A of the attached report for a breakdown by age for all plans.

Actuarial Equivalent Option Factors

Board Resolution AESD-98-001 requires the Board to review the appropriateness of the actuarial equivalent option factors whenever there is a change in either the post-retirement mortality tables or the actuarial investment return assumption used for purposes of the annual actuarial valuation of the liabilities of the system. Any changes to the actuarial equivalent factors require Board approval.

Actuarial equivalent option factors are used by the system to convert a member's unmodified retirement allowance into an alternate form of payment. For example, a member may select a reduced benefit in return for the ability to continue payments to a named beneficiary upon death of the member. Based upon the ages of the member and beneficiary, a specific factor is used to reduce the member's unmodified allowance. The purpose of actuarial equivalent option factors is to leave the actuarial cost to the system unchanged depending on the form of payment elected by the retiree.

The first change to actuarial option factors occurred in 1982. Prior to the 1982 U.S. Supreme Court decision (Norris), the age and sex of the member and beneficiary were used to determine the actuarial equivalent option factors. Since the Norris decision, sex-distinct tables are no longer used in developing actuarial equivalent option factors. Now, two separate sets of factors exist: a best factor table for members who joined CalPERS prior to July 1, 1982 and a unisex table for those who joined on or after that date.

In 1997, the actuarial firm of Milliman and Robertson, Inc. prepared an Option Factor Study. In the Study, possible simplified actuarial equivalent option factors were prepared as consideration to replace the voluminous tables in place at that time. The Simplified Benefit Option Factors were approved in 1999 by the Board and went into effect July 1, 2000.

Subsequently, based on the CalPERS Experience Study 1997-2002 and adoption of the demographic assumptions from the study, the Simplified Benefit Option Factors were updated to Simplified Benefit Option Factors II effective December 30, 2004.

More recently, at its April 2010 meeting, the Board accepted the CalPERS Experience Study 1997-2007 and approved new demographic actuarial assumptions for use in actuarial valuations dated on and after June 30, 2009.

Staff recommends the use of the new actuarial demographic assumptions in all affected member calculations effective immediately upon Board approval. This includes, but is not limited, to the creation of a new set of actuarial equivalent option factors that will be referred to as the Simplified Benefit Option Factors III as well as a new set of temporary annuity factors and a new set of Actuarial Equivalent Reduction (AER) factors. Any retirement application received by CalPERS with a retirement date after the Board taking action will be subject to the new factors. Retirement prior to the Board taking action will continue to be subject to the current factors.

The application of the new demographic actuarial assumptions for actuarial equivalent option factors will result in most cases in a smaller reduction in benefit for members selecting an optional form of retirement, or said another way, the implementation of the new assumptions will generally benefit members upon retirement.

Implementation and Communication

In order to implement the new actuarial assumptions for all member calculations, staff has developed a project plan to ensure completion and implementation as soon as possible. However, due to the amount of work involved some affected systems will not be updated for some time. We will take steps to minimize the impact on members retiring prior to all systems being updated.

Member retiring after the Board takes action but prior to our systems being updated will still be able to retire. However, their retirement benefits if they elect an optional settlement at retirement will be based upon the factors in place prior to the Board taking action. When our systems are updated, these members will see a retro-active adjustment to their retirement benefit. We expect that this adjustment will result in an increase in the retirement benefit in most cases.

For service credit purchases under the present value method, any request received on or after the Board takes action will be placed on hold and processed in the order received once our systems are up and running.

The implementation plan includes coordination with PSR to ensure PSR resources and milestones are not impacted. The plan also includes training for CalPERS staff to prepare for member and employer support.

A major focus of the plan is communications to members and employers. Staff has developed a communications plan to educate and inform CalPERS employees, members, employers and stakeholders about the changes. To meet these goals, an initial set of communications will be delivered to members and employers through a variety of potential sources including the CalPERS Circular Letters, CalPERS On-Line and FAQs, CEC Education Modules, Social Media (Facebook, Twitter), and eBulletin Broadcast Emails.

V. STRATEGIC PLAN:

This item is not a specific product of the Strategic or Annual Plans but is part of the regular and ongoing workload of the Actuarial & Employer Services Branch.

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Attachment